

ABSTRACT

DIRECT CONVERSION RADIO TRANSCEIVER

5 A radio transceiver capable of transmitting and receiving on a common radio channel in a half duplex mode includes a direct conversion transmitter and a low IF receiver. A common signal generator (2, 2', 2'') comprises a first and second frequency generator (40, 41). The first frequency generator generates a carrier frequency signal which is used by both the transmitter and receiver.

10 During reception, the second frequency generator generates an offset signal at the low IF frequency which is mixed with the carrier frequency signal to form a down conversion signal. During transmission, modulation is applied either directly to the carrier frequency signal in one embodiment, or to the offset signal which is then mixed with the carrier frequency signal to form a modulated carrier frequency signal in another embodiment.

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(Figure 1)